

IMAGE SENSING STRUCTURE

Abstract of the Disclosure

A CMOS image sensing structure includes a photodiode, in which an epitaxial layer is on a P-type substrate. The photodiode includes an N-well collection node in the epitaxial layer. An isolation trench is provided around the collection node to provide better control of the width of the collection node. The collection node can be surrounded by P-wells or by epitaxial material. It can also be surrounded by epitaxial material with the isolation trench being outwardly extended to ensure compliance with existing design rules.